

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Before the Board of Patent Appeals and Interferences**

Applicant : John R. Zaleski  
Serial No. : 10/645,234  
Filed : August 21, 2003  
For : Healthcare System Supporting Multiple Network Connected Fluid  
Administration Pumps  
Examiner : Phillip A. Gray  
Art Unit : 3767

**APPEAL BRIEF**

May It Please The Honorable Board:

Appellants appeal the Office Action dated January 23, 2007 of Claims 1-18 of the above-identified application. The fee of five hundred dollars (\$500.00) for filing this Brief and any associated extension fee is to be charged to Deposit Account No. 19-2179. Enclosed is a single copy of this Brief.

Please charge any additional fee or credit any overpayment to the above-identified Deposit Account.

Appellants do not request an oral hearing.

### **I. REAL PARTY IN INTEREST**

The real party in interest of Application Serial No. 10/645,234 is the Assignee of record:

Siemens Medical Solutions Health Services Corporation  
51 Valley Stream Parkway  
Malvern, PA 19355-1406

### **II. RELATED APPEALS AND INTERFERENCES**

There are currently, and have been, no related Appeals or Interferences regarding Application Serial No. 10/645,234.

### **III. STATUS OF THE CLAIMS**

Claims 1-15 and 18 are rejected and the rejection of claims 1-15 and 18 is appealed. Claims 16 and 17 have been withdrawn from prosecution and are not rejected or discussed in this Appeal Brief.

### **IV. STATUS OF AMENDMENTS**

All amendments were entered and are reflected in the claims included in Appendix I. No amendments were made to the claims after the Final Rejection.

### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Independent claim 1 provides an information system supporting a plurality of network connected infusion pumps (page 1, lines 10-13; page 1, lines 21-23; Fig. 1, reference no. 5b, 6b, 8). An acquisition processor (page 2, lines 6-8) acquires fluid

infusion related data (page 3, lines 20-22) from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations. A data processor (page 2, line 8) processes the acquired fluid infusion related data to provide data suitable for presentation in single display image (page 6, lines 19-22; Fig. 4; Fig. 5) identifying the plurality of concurrently operating infusion pumps together with status information (page 2, line 10; page 6, line 3) identifying status of individual pumps of the plurality of concurrently operating infusion pumps (page 6, lines 12-16). The display image includes a plurality of user selectable elements associated with the corresponding plurality of concurrently operating infusion pumps. A display processor initiates generation of data representing the single display image and a second image (page 6, lines 26-28; Fig. 6) including parameters specific to a particular pump in response to user selection of a displayed element associated with the particular pump (page 6, lines 24-26; Fig. 2, reference no. 210).

Dependent claim 2 includes the system of independent claim 1 along with the acquisition processor acquiring the fluid infusion related data via a network (page 4, lines 1-10; Fig. 1). The acquired fluid infusion related data provides data associated with individual pumps including at least one of, pump location, pump access address, pump start time, pump flow rate, a fluid identifier in a pump and fluid volume dispersed (page 6, lines 10-16; Fig. 4; Fig. 5).

Dependent claim 3 includes the system of claim 2 in which the plurality of concurrently operating infusion pumps being connected to an Internet Protocol (IP)

compatible network (page 5, lines 18-23; Fig. 1) and the pump access address being an IP address (page 6, line 14).

Dependent claim 4 includes the system of claim 1 along with the second image (page 6, lines 26-28; Fig. 6) including data identifying at least one of, pump location and an associated patient.

Dependent claim 5 includes an information system according to claim 1 with the second image (page 6, lines 26-28; Fig. 6) including at least one of, a current fluid flow rate, fluid volume delivered, a fluid identifier, an authorizing physician identifier, a fluid infusion time remaining indicator, a particular pump IP address, a current time, a user selectable data refresh rate, parameters specific to the particular pump and a user selectable item supporting user manual entry of a fluid infusion related value (page 6, lines 25-34).

Dependent claim 6 includes an information system according to claim 5 in which the second image includes at least one of a graphical representing of fluid infusion flow rate (page 7, lines 3-4; Fig. 6) and a graphical representation of infusion fluid volume delivered (page 7, line 4; Fig. 6).

Dependent claim 7 includes an information system according to claim 5 with the user selectable item supporting user manual entry of a fluid infusion related value

initiates generation of a third image (page 6, line 32 to page 7, line 1) enabling at least one of, a user to alter an existing infusion flow rate or fluid volume delivered value (page 7, lines 1-2) and a user to add a new infusion flow rate or fluid volume delivered value (page 7, lines 2-4).

Dependent claim 8 includes an information system according to claim 1 with the additional feature of an authentication processor for determining whether a user is authorized (page 3, lines 14-16) to access information concerning an infusion pump (page 5, lines 20-31) and the data processor inhibits presentation of the second image including parameters specific to the particular pump in response to a determination that access is unauthorized (page 5, lines 31-33; Fig. 2, reference no. 206).

Dependent claim 9 includes an information system according to claim 1 with the additional feature of the second image including data identifying pump location. An authentication processor is included for determining whether a user is authorized to access information concerning an infusion pump and the data processor inhibits access to pump information in response to a determining that access is unauthorized (page 5, lines 20-33; Fig. 2, reference no. 206).

Dependent claim 10 includes an information system according to claim 1 with the data processor processing the acquired fluid infusion related data to provide data to at least one of, a repository of electronic patient medical records for storage in a

corresponding plurality of electronic patient medical records in the repository, a pharmacy information system for use in re-stocking medications, a medical order information system for use in monitoring use of particular fluid medications and a patient management information system for use in monitoring patient usage of fluid medications (page 7, line 29 to page 8, line 3).

Dependent claim 11 includes an information system according to claim 1 in which the acquisition processor acquires the fluid infusion related data via a network supporting communication with the plurality of concurrently operating infusion pumps (page 2, line 10) providing fluid infusion to a corresponding plurality of different patients in different locations (page 1, lines 10-14).

Independent claim 12 provides a system supporting a plurality of network connected infusion pumps (page 1, lines 10-13; page 1, lines 21-23; Fig. 1, reference no. 5b, 6b, 8). An acquisition processor (page 2, lines 6-8) receives fluid infusion related data from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations. The received data identifies the plurality of concurrently operation infusion pumps together with status information (page 2, line 10; page 6, line 3) identifying status of individual pumps of the plurality of concurrently operating infusion pumps. A data processor processes the received fluid infusion related data to be suitable for storage in a database. A conversion processor retrieves fluid infusion related data from the database and converts the retrieved fluid infusion related data to a data format of a second different system.

Dependent claim 15 includes an information system according to claim 12 in which the acquisition processor receives fluid infusion related data from the plurality of concurrently operation infusion pumps using Internet Protocol (IP) compatible communication (page 5, lines 18-23; Fig. 1).

Dependent claim 18 includes an information system according to claim 1 with the additional feature that the single display image shows the plurality of concurrently operating infusion pumps authorized by, or for patients, under the care of at least one of a physician, nurse, care unit, hospital department, clinic or practice group (page 6, lines 4-12).

#### **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by De La Huerga (U.S. Patent Application Number US 2002/0038392).

Claims 3 and 15 are rejected, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over De La Huerga (U.S. Patent Application Number US 2002/0038392).

The Final Rejection does not explicitly reject claim 18 yet fails to indicate that claim 18 is allowable. Therefore, Applicant will treat claim 18 discussed herein below as being rejected in view of De La Huerga.

Claims 16 and 17 have been withdrawn from prosecution and are not rejected herein and will not be discussed.

## **VII. ARGUMENT**

De La Huerga does not anticipate claims 1-15 of the present claimed invention. De La Huerga also does not make claims 3 and 15 of the present claimed invention unpatentable. Thus, reversal of the Final Rejection (hereinafter termed “rejection”) of claims 1-15 and 18 under 35 U.S.C. § 102(e) and claims 3 and 15 under section 35 U.S.C. § 103 (a) is respectfully requested.

### **Overview of the Cited References**

De La Huerga describes a method and apparatus for controlling and monitoring IV medication delivery. The method includes providing information tags on IV bags that specify delivery parameters, obtaining delivery parameters for at least one bag, associating a controller with a particular patient, comparing patient information for the particular patient with the delivery parameters, determining the efficacy of delivering the medicant to the patient and affecting pump control as a function of the comparison. The method also includes various timing rules and other verification procedures. (See Abstract)

### **Rejection of Claims 1-15 under 35 USC 102(e) over De La Huerga (U.S. Patent**

### **Application Number US 2002/0038392)**



De La Huerga does not anticipate claims 1-15. Thus, reversal of the Final Rejection (hereinafter termed “rejection”) of claims 1-15 under 35 U.S.C. § 102(e) is respectfully requested.

CLAIMS 1, 4, 5, 9, and 10

The present claimed invention recites an information system supporting a plurality of network connected infusion pumps. An acquisition processor acquires fluid infusion related data from a plurality of different patients in different locations. A data processor processes the acquired fluid infusion related data to provide data suitable for presentation in a single display image identifying the plurality of concurrently operating infusion pumps together with status information identifying status of individual pumps of the plurality of concurrently operating infusion pumps. The display image includes a plurality of user selectable elements associated with the corresponding plurality of concurrently operating infusion pumps. A display processor initiates generation of data representing the single display image and a second image including parameters specific to a particular pump in response to user selection of a displayed element associated with the particular pump. These features are not shown or suggested by De La Huerga.

De La Huerga describes a method and system for managing medicant infusion processes for **a single patient**. De La Huerga repeatedly describes in paragraphs [0201] - [0209] pumps associated with a single patient (12, 222) and the concurrent status display of the pumps connected to a **single patient** (222 in Figures 27, 28 and 29). Applicant respectfully submits that this is wholly unlike the present claimed invention where a

network provides “concurrently operating infusion pumps providing fluid infusion to a corresponding **plurality of different patients in different locations.**” De La Huerga is concerned with multiple IV lines for a single patient getting tangled, separate interfaces for each pump unit for a single patient, mis-medication problems when several IV bags are linked to a single patient via several pump units, and modifying medicant delivery rates when several medicants are simultaneously delivered to a single patient in a single location (paragraph [0011], [0012], [0013] and [0014]). De La Huerga provides no architecture supporting network communication that is required for acquiring information from **multiple pumps** associated with **different patients in different locations**, as in the present claimed invention. Instead, De La Huerga teaches a data structure 282, in paragraph [0151], where “patient information 282 MUST be useable to uniquely identify a SINGLE patient.” The present claimed invention, on the other hand, addresses the problem where existing pump and medication administration systems fail to support the management of the operation of multiple pumps operating concurrently for “a corresponding plurality of different patients in different locations” within a healthcare enterprise. Thus, the present claimed arrangement is fundamentally different from the system and method described in De La Huerga. Supporting multiple infusion pumps associated with different patients in different locations, as in the present claimed invention, is NOT equivalent to multiple pumps associated with a single patient in a single location. De Le Huerga is not able to operate in a manner equivalent to the present claimed system and therefore does not anticipate the present claimed invention.

The Office Action cites paragraphs [0003]-[0019], [0186-0234], [0273] and claim 42 of De La Huerga as being relevant to the present claimed invention. Applicant respectfully disagrees. Cited passages [0003]-[0019] and [0186-0234] of De La Huerga, unlike the present claimed arrangement, are only concerned with an IV system containing multiple pumps attached to a single patient. Additionally, De La Huerga describes a controller, where the controller “is portable, e.g. on a push cart, carried, or on a trolley, and where controller 260 is able to receive and review information on several patients, a split communication channel 255 protocol may be used. For example when controller 260 is only receiving and displaying information from an IV pump 140 attached to a patient, channel 255 may be adjusted to use a relatively high power or may be networked via an 802.11, Bluetooth or other network. However, for controller 260 to be able to adjust the flow rate 292, duration 293, dose 294, etc. communication channel 255 may be set to operate at a low power setting only or may operate on a different local channel, e.g. infrared (IR) or acoustic transmissions) thereby ensuring that controller 260 is **only** in communication with proximal IV pumps 100” (paragraph 0273). Thus, the controller communicates through a network (i.e. wired, wirelessly) in order to adjust the flow rate, duration, dose, etc. of the pumps. However, this network connection merely concerns communication with multiple types of pumps or devices that are connected to a single patient at a single location. Therefore, even though the controller in De La Huerga is networked to communicate with the infusion pumps, this does not disclose or suggest “an acquisition processor for acquiring fluid infusion related data from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations” as recited in the present claimed

invention. Rather, De La Huerga may control the operation of all the pumps for a single patient in a single location. The moveability of the cart described above does not mean that the system “acquir[es] fluid infusion related data **from a plurality of concurrently operating infusion pumps...of different patients in different locations**” as in the present claimed invention. Instead, De La Huerga enables the system to be moveable to different areas to different patients allowing control over all pumps/devices attached to the particular patient proximal to the De La Huerga system.

Claim 42 of De La Huerga, cited by the Office Action, describes:

A method for controlling an infusion pump assembly comprising the steps of:

- providing a prescription database indicating patients and corresponding prescribed medications;

- providing at least one IV bag including an information device that indicates medication information including the medication included in the IV bag;

- obtaining medication information from the information device;

- providing at least one patient identification device including information identifying a specific patient;

- obtaining the patient identifying information from the patient identification device;

- accessing the database and identifying the prescriptions for the patient identified by the identification device;

- comparing the medication in the IV bag with the prescriptions; and

- determining if the medication in the IV bag is administrable to the patient.

The claim may describe a prescription database that indicates patients and their corresponding prescribed medications, however, the claim only deals with a particular patient and determines if the medication is administrable to the patient after comparing medications and prescriptions. Merely providing the capability of comparing medications with prescriptions for a certain patient, as in De La Huerga, is wholly unlike the present claimed invention which provides “fluid infusion to a corresponding plurality of **different** patients in different locations.” Additionally, claim 42 of De La Huerga does not address the issue of the **different locations** patients may be stationed at, as in the present claimed invention. Claim 42 of De La Huerga merely describes obtaining data, comparing the obtained data and distributed medication based on the result of the comparison. De La Huerga fails to mention “processing” acquired data that includes infusion pump related data of different patients at different locations to be “suitable for presentation in a single display image” as in the claimed arrangement. Therefore, Applicant respectfully submits that claim 42 in De La Huerga provides no 35 USC 112 compliant enabling disclosure that would anticipate claim 1 of the present claimed invention.

Applicant further respectfully submits that De La Huerga in Figures 26a (reference no. 620), 27-29, 36 and 44 (specifically reference no. 291, 306, 308, 310 and 304 included in these above cited figures) neither discloses nor suggests “a single display image” wherein “said display image includes a plurality of user selectable elements associated with said corresponding plurality of concurrently operating infusion pumps,” as recited in the present claimed invention. Nor do these figures cited in the Office

Action disclose or suggest, “a display processor for initiating generation of data representing said single display image and a second image including parameters specific to a particular pump in response to user selection of a displayed element associated with said particular pump” as recited in the present claimed invention. Rather, the figures merely describe specific patient identification information related to a patient. “In FIG. 27 ... medicant information identifying current medicant delivery status is provided. The medicant information identifies each medicant 300 currently linked to patient 12 along with pump unit status 291 indicating current delivery rate. For instance, medicant Greenicillin is currently being delivered to John Smith at a rate of 0.7 mg./kg./min. while Redicillin is currently turned off. Also shown on FIG. 27 is a physician indicator (under the date/time, i.e., in this case, ‘J. D. Anderson, R.N.’) indicating a physician currently using controller 260” (paragraph [0205]. Buttons 306, 308 and 310 cited by the Office Action are referred to as “soft keys” in De La Hueraga. “Icon 306 include up and down arrows which are separately selectable to increase and decrease delivery of the medicant currently displayed via screen 264, respectively. Icon 308 is an ‘OFF’ icon useable to temporarily turn off a corresponding pump unit to halt medicant delivery. Icon 310 is a ‘DC’ icon where DC stands for discontinue. When icon 310 is selected, the physician is indicating that corresponding medicant delivery should be discontinued. Although not illustrated other keys for altering the duration of medicant delivery are contemplated” (paragraph [0208]). Figure 36 of De La Hueraga describes a “Patient Medication Volume Monitor” displaying the IV bag number, the rate, the duration and volume associated with each IV bag along with the total volume being displayed. However, nowhere in De La Hueraga is there any suggestion or description of “said **single display image** includes a

plurality of user selectable elements associated with said corresponding plurality of concurrently operating infusion pumps; and a display processor for initiating generation of data representing said single display image **and a second image** including parameters specific to a particular pump in response to user selection of a displayed element associated with said particular pump” as recited in the present claimed invention. Rather, De La Huerga is only concerned with pump information for a single patient and NOT for a single image display of data corresponding to a plurality of different infusion pumps for a plurality of different patients at different locations. The claimed invention facilitates central monitoring of multiple patients whereas De La Huerga is concerned with monitoring all the devices attached to a single patient.

The Office Action, on page 4 of the Rejection, further argues that “De La Huerga applies to a plurality of pumps of concurrently operation infusion pumps to a plurality of different patients in different locations. Examiner draws applicant’s attention to Paragraph [0273] and claim 42 for examples of operation of the device on a plurality of concurrently operating pumps on a plurality of patients in different locations. It is examiners position that the De La Huerga’s use of the word ‘patient’ or ‘single patient’ is describing the function of the network system at the single patient level and that De La Huerga fully would be capable and ... [encompass] a plurality of patients ... Any description of single patient would be at the one level of operation and multiple concurrent plurality of patients and pumps is fully capable and taught in De La Huerga.” Applicant respectfully disagrees. Moreover, Applicant respectfully submits that there is no 35 USC 112 compliant enabling disclosure in De La Huerga to support this assertion

of the Examiner and that it is unreasonable to read this feature into De La Huerga. De La Huerga may utilize more than one infusion pump but De La Huerga, for the reasons presented above, clearly is concerned with one patient that may require multiple medicants delivered via multiple devices. De La Huerga, contrary to the assertion of the Rejection, does not provide 35 USC 112 compliant enabling disclosure of acquiring fluid infusion data from a plurality of concurrently operating infusion pumps corresponding to a plurality of different patients in different locations, as in the present claimed invention. Applicant respectfully submits that the Office Action erroneously states that De La Huerga “disclose[s] ‘providing fluid infusion to a corresponding plurality of different patients in different locations.’” While De La Huerga describes relocating a patient’s IV system within a patient’s room, the relocation of the IV system is for a **single patient**. Specifically, De La Huerga provides that “IV systems are often provided on wheeled upright supports that can be moved about a patient within the patient’s room. Such movement can cause a plurality of IV lines to be come entangled” (paragraph [0011]). Thus, De La Huerga provides wheels in order to mobilize the IV system to prevent tangling of lines of multiple pumps **for that particular patient**. However, this is not equivalent to the present claimed invention which recites “acquiring fluid infusion related data from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding **plurality of different patients** in different locations.” De La Huerga would have no reason to provide a system for different patients as De La Huerga deals only with an individual patient whose IV wires may be entangled with one another. Therefore, there is no 35 U.S.C. 112 compliant enabling disclosure in De La Huerga that



would anticipate the present claimed invention. Consequently, withdrawal of the rejection of amended claim 1 under 35 USC 102(e) is respectfully requested.

Claims 4, 5, 9 and 10 are dependent on claim 1 and are considered to be patentable for the reasons given above in connection with claim 1. Therefore, withdrawal of the rejection of claims 4, 5, 9 and 10 under USC 102(e) is respectfully requested.

### CLAIM 2

Claim 2 is dependent on claim 1 and is considered to be patentable for the reasons given above with respect to claim 1. Claim 2 is also considered to be patentable because De La Huerga neither discloses nor suggests that “said acquisition processor acquires said fluid infusion related data via network and said acquired fluid infusion related data provides data associated with individual pumps including at least one of, (a) pump location, (b) pump access address, (c) pump start time, (d) pump flow rate, (e) a fluid identifier in a pump and (f) fluid volume dispensed” as recited in the present claimed invention. De La Huerga fails to disclose **any architecture or UI** supporting such network communication required for acquiring fluid related data from multiple pumps associated with different patients in different locations and thus, cannot acquire the fluid infusion related data via a network and provide data associated with individual pumps in accordance with claim 2. Although De La Huerga may describe a “controller” which may be networked to receive and display “information from an IV pump ... attached to a patient” (paragraph [0273]), the controller does not perform the functions of the acquisition processor of the present claimed invention. Rather, the function of the

controller in De La Huerga is to merely display information from the IV pump[s] that are attached to a single patient (see above arguments in claim 1 and paragraphs [0273] of De La Huerga). Therefore, De La Huerga neither discloses nor suggests the features of the present claimed invention. Consequently, withdrawal of the rejection of amended claim 2 under 35 USC 102(e) is respectfully requested.

### CLAIM 3

Claim 3 is dependent on claims 1 and 2 and is considered to be patentable for the reasons given above with respect to claims 1 and 2. Claim 3 is also considered to be patentable because De La Huerga neither discloses nor suggests that “said plurality of **concurrently operating infusion pumps**” which are associated with a plurality of different patients at different locations “are connected to an Internet Protocol (IP) compatible network and said pump access address is an IP address” as recited in claim 3 of the present invention. Although De La Huerga may describe one more infusion pumps attached to a single patient, nowhere in De La Huerga is there mention or suggestion of the pumps being connected to an Internet Protocol (IP) compatible network, where the pump access address is an IP address as in the present claimed invention. As De La Huerga is only concerned with one patient who may have multiple pumps attached to him/her, there is no reason or motivation for De La Huerga to connect the infusion pumps to an IP-based network which enables transmission of data acquired from different patient locations or provide the composite multi-pump status UI, as in the present claimed invention. In De La Huerga, the individual patient information can be locally accessed by a controller and any network described therein is a short-range network such as a

802.11-based network enabling the multiple devices connected to the single patient to communicate with the controller.. Additionally, because De La Huerga does not connect to an Internet Protocol (IP) compatible network, the pump access addresses cannot be IP addresses, as in the present claimed invention.

Furthermore, the Office Action on page 7 admits that De La “Huerga discloses the claimed invention **except** for explicitly stating that the pump access address would be an Internet Protocol (IP) compatible network address.” Page 7 of the Office Action also states the possibility that claim 3 may “**not** [be] anticipated by [De La] Huerga.” Therefore, Applicant respectfully submits that De La Huerga neither discloses nor suggests that “said plurality of concurrently operating infusion pumps are connected to an Internet Protocol (IP) compatible network and said pump access address is an IP address” as recited in claim 3 of the present invention. Consequently, withdrawal of the rejection of amended claim 3 under 35 USC 102(e) is respectfully requested.

#### CLAIM 6

Dependent claim 6 is considered to be patentable based on its dependence on claim 1. Claim 6 is also considered to be patentable because De la Huerga neither discloses nor suggests “said second image includes at least one of, (a) a graphical representation of fluid infusion flow rate and (b) a graphical representation of infusion fluid volume is delivered,” as recited in the present claimed invention. Nowhere in De la Huerga is there any mention or suggestion of any type of graphical representation of any type of data. Therefore, De La Huerga neither discloses nor suggests the features of the

present claimed invention. Consequently, withdrawal of the rejection of amended claim 6 under 35 USC 102(e) is respectfully requested.

#### CLAIM 7

Claim 7 is dependent on claim 1 and is considered to be patentable for the reasons given above with respect to claim 1. Claim 7 is also considered to be patentable because De La Huerga neither discloses nor suggests that “said user selectable item supporting user manual entry of a fluid infusion related value initiates generation of a **third** image enabling at least one of, (a) a user to alter an existing infusion flow rate or fluid volume delivered value and (b) a user to add a new infusion flow rate or fluid volume delivered value” as recited in claim 7 of the present invention. Contrary to the assertions in the Office Action, paragraph [0273] of De la Huerga merely describes a controller adjusting the flow rate. Similarly, paragraph [0294] of De la Huerga describes the controller determining the flow rate after a physician changes a dosage of medication. Nowhere in these passages or elsewhere in De la Huerga is there any description or suggestion of, “said user selectable item supporting user manual entry of a fluid infusion related value initiates generation of a third image enabling at least one of, (a) a user to alter an existing infusion flow rate or fluid volume delivered value and (b) a user to add a new infusion flow rate or fluid volume delivered value,” as recited in the present claimed invention. Consequently, withdrawal of the rejection of amended claim 7 under 35 USC 102(e) is respectfully requested.

CLAIM 8

Dependent claim 8 is considered to be patentable based on its dependence on claim 1. Claim 8 is also considered to be patentable because De La Huerga neither discloses nor suggests, “an authentication processor for determining a user is authorized to access information concerning an infusion pump and said data processor inhibits presentation of said second image including parameters specific to said particular pump in response to a determination access is unauthorized,” as recited in claim 8 of the present invention. De la Huerga merely describes determining whether “the physician is authorized to dispense the medicant to the patient” (paragraph [0161]). If the physician is unauthorized, the processor indicates the unauthorized status. Applicant respectfully submits that this is wholly unlike the present claimed invention where authorization is needed “to access information concerning an infusion pump and said data processor inhibits presentation of said second image including parameters specific to said particular pump in response to a determination access is unauthorized,” as recited in the present claimed invention. As discussed above regarding claim 1, De La Huerga is concerned with pumps associated with a single patient and the status display of pumps connected to a single patient. De La Huerga is not concerned with concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations as in the present claimed invention. Thus, there is no recognition in De La Huerga of the problems associated with restricting access to information for patients based on authorization as a user may only be granted access to view information on certain patients while restricting access to information on other patients. As De la Huerga is only concerned with a single patient, there is no reason or motivation to

consider such a feature as claimed in claim 8. Consequently, withdrawal of the rejection of amended claim 8 under 35 USC 102(e) is respectfully requested.

### CLAIM 11

Dependent claim 11 is considered to be patentable based on its dependence on claim 1. Claim 11 is also considered to be patentable because De La Huerga neither discloses nor suggests, “said acquisition processor acquires said fluid infusion related data via a network supporting communication with said plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations,” as recited in claim 11 of the present invention. As argued above with respect to claim 1, De La Huerga is concerned with having a plurality of infusion pumps attached to a single individual patient. De la Huerga provides no 35 USC 112 enabling disclosure of “concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of **different patients in different locations**,” as recited in the present claimed invention. Consequently, withdrawal of the rejection of amended claim 11 under 35 USC 102(e) is respectfully requested.

### CLAIMS 12 and 13

The present claimed invention recites a system supporting a plurality of network connected infusion pumps. An acquisition processor receives fluid infusion related data from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations. The received data identifies the plurality of concurrently operation infusion pumps together with status

information identifying status of individual pumps of the plurality of concurrently operating infusion pumps. A data processor processes the received fluid infusion related data to be suitable for storage in a database. A conversion processor retrieves fluid infusion related data from the database and converts the retrieved fluid infusion related data to a data format of a second different system. These features are not shown or suggested by De La Huerga.

De La Huerga describes a method and system for managing medicant infusion processes for a **single patient**. De La Huerga repeatedly describes in paragraphs [0201] - [0209] pumps associated with a single patient (12, 222) and the concurrent status display of pumps connected to a **single patient** (222 in Figures 27, 28 and 29). Applicant respectfully submits that this is wholly unlike the present claimed invention where a network provides “concurrently operating infusion pumps providing fluid infusion to a corresponding **plurality of different patients in different locations**.” De La Huerga is concerned with multiple IV lines for a single patient getting tangled, separate interfaces for each pump unit for a single patient, mis-medication problems when several IV bags are linked to a single patient via several pump units, and modifying medicant delivery rates when several medicants are simultaneously delivered to a single patient (paragraph [0011], [0012], [0013] and [0014]). De La Huerga provides no architecture supporting such network communication required for acquiring information from multiple pumps associated with different patients in different locations, as in the present claimed invention. Instead, De La Huerga teaches a data structure 282, in paragraph [0151], where “patient information 282 **MUST** be useable to uniquely identify a **SINGLE**

patient.” The present claimed invention, on the other hand, addresses the problem where existing pump and medication administration systems fail to support the management of the operation of multiple pumps operating concurrently for “a corresponding plurality of different patients in different locations” within a healthcare enterprise.

The Office Action cites paragraphs [0003]-[0019], [0186-0234], [0273] and claim 42 of De La Huerga as being relevant to the present claimed invention. Applicant respectfully disagrees. Cited passages [0003]-[0019] and [0186-0234] of De La Huerga are only concerned with an IV system containing multiple pumps attached to a single patient. Additionally, De La Huerga describes a controller, where the controller “is portable, e.g. on a push cart, carried, or on a trolley, and where controller 260 is able to receive and review information on several patients, a split communication channel 255 protocol may be used. For example when controller 260 is only receiving and displaying information from an IV pump 140 attached to a patient, channel 255 may be adjusted to use a relatively high power or may be networked via a 802.11, Bluetooth or other network. However, for controller 260 to be able to adjust the flow rate 292, duration 293, dose 294, etc. communication channel 255 may be set to operate at a low power setting only or may operate on a different local channel, e.g. infrared (IR) or acoustic transmissions) thereby ensuring that controller 260 is only in communication with proximal IV pumps 100” (paragraph 0273). Thus, the controller communicates through a network (i.e. wired, wirelessly) in order to adjust the flow rate, duration, dose, etc. of the pumps. However, even though the controller is networked to communicate with the infusion pumps, this does not disclose or suggest “an acquisition processor for receiving



fluid infusion related data from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations, said received data identifying said plurality of concurrently operating infusion pumps together with status information identifying status of individual pumps of said plurality of concurrently operating infusion pumps” as recited in the present claimed invention.

Claim 42 of De La Huerga, cited by the Office Action, may describe a prescription database that indicates patients and their corresponding prescribed medications, however, the claim only deals with a particular patient and determines if the medication is administrable to the patient after comparing medications and prescriptions. Merely providing the capability of comparing medications with prescriptions for a certain patient, as in De La Huerga, is wholly unlike the present claimed invention which provides “fluid infusion to a corresponding plurality of **different** patients in different locations.” Additionally, claim 42 of De La Huerga does not address the issue of the **different locations** patients may be stationed at, as in the present claimed invention. Therefore, De La Huerga does not anticipate claim 1 of the present claimed invention.

The Office Action, on page 4 of the Rejection, argues that “De La Huerga applies to a plurality of pumps of concurrently operation infusion pumps to a plurality of different patients in different locations. Examiner draws applicant’s attention to Paragraph [0273] and claim 42 for examples of operation of the device on a plurality of concurrently operating pumps on a plurality of patients in different locations. It is

examiners position that the De La Huerga art use of the word 'patient' or 'single patient' is describing the function of the network system at the single patient level and that De La Huerga fully would be capable and ... [encompass] a plurality of patients ... Any description of single patient would be at the one level of operation and multiple concurrent plurality of patients and pumps is fully capable and taught in De La Huerga." Applicant respectfully disagrees. Although De La Huerga may utilize more than one infusion pump, De La Huerga deals only with one patient, and not a plurality of different patients in different locations, as in the present claimed invention. Applicant respectfully submits that the Office Action erroneously states that De La Huerga "disclose[s] 'providing fluid infusion to a corresponding plurality of different patients in different locations.'" While De La Huerga describes relocating a patient's IV system within a patient's room, the relocation of the IV system is for a **single patient**. "IV systems are often provided on wheeled upright supports that can be moved about a patient within the patient's room. Such movement can cause a plurality of IV lines to be come entangled" (paragraph [0011]). Thus, De La Huerga provides wheels in order to mobilize the IV system. However, this is not equivalent to the present claimed invention which recites "providing fluid infusion to a corresponding **plurality of different patients** in different locations." Moreover, De La Huerga is only concerned with the tangling of IV wires for **one patient**. There is no suggestion or disclosure of the problem of, for example, tangling of IV wires for a plurality of patients. De La Huerga would have no reason to provide a system for different patients as De La Huerga deals only with an individual patient whose IV wires may be entangled with one another. Therefore, there is no U.S.C.

112 compliant enabling disclosure in De La Huerga that would anticipate the present claimed invention.

Additionally, De La Huerga nowhere shows or suggests “a conversion processor for retrieving fluid infusion related data from said database and for converting said retrieved fluid infusion related data to a data format of a second different system” as recited in claim 12 of the present invention. Therefore, De La Huerga does not anticipate claim 12 of the present invention. Consequently, withdrawal of the rejection of amended claim 12 under 35 USC 102(e) is respectfully requested.

Claim 13 is dependent on claim 12 and is considered to be patentable for the reasons given above in connection with claim 12. Therefore, withdrawal of the rejection of claim 13 under USC 102(e) is respectfully requested.

#### CLAIM 14

Dependent claim 14 is considered to be patentable based on its dependence on claim 1. Claim 14 is also considered to be patentable because De La Huerga neither discloses nor suggests that “said conversion processor converts said retrieved fluid infusion related data to a data format suitable for presentation in a single display image,” as recited in claim 14 of the present invention. Applicant respectfully submits that De La Huerga provides no 35 USC 112 enabling disclosure of this feature combination. The Office Action cites elements 104 and 620 of De La Huerga as being relevant to the present claimed invention. Applicant respectfully disagrees. Processor 104 is included in

controller 103 of De La Huerga (see paragraph [0145]). Processor 260 is included in controller 260 (see paragraph [0192]). However, neither of these processors (or any other element in De La Huerga) describes converting the retrieved fluid infusion related data to a data format suitable for presentation in a single display image, as in the present claimed invention. Therefore, De La Huerga neither discloses nor suggests that “said conversion processor converts said retrieved fluid infusion related data to a data format suitable for presentation in a single display image,” as recited in claim 14 of the present invention. Consequently, withdrawal of the rejection of amended claim 14 under 35 USC 102(e) is respectfully requested.

#### CLAIM 15

Claim 15 is dependent on claim 12 and is considered to be patentable for the reasons given above with respect to claim 12. Claim 15 is also considered to be patentable because De La Huerga neither discloses nor suggests that “said acquisition processor receives fluid infusion related data from said plurality of concurrently operating infusion pumps using Internet Protocol (IP) compatible communication” as recited in claim 15 of the present invention. Although De La Huerga may describe one more infusion pumps attached to a single patient, nowhere in De La Huerga is there mention or suggestion of the concurrently operating infusion pumps using Internet Protocol (IP) compatible communication as in the present claimed invention. As De La Huerga is only concerned with one patient who may have multiple pumps attached to him/her, there is no reason or motivation for De La Huerga to connect the infusion pumps

to a network, as in the present claimed invention. This is because the individual patient information can be locally accessed by a controller, as described by De La Huerga.

Furthermore, the Office Action on page 7 admits that De La “Huerga discloses the claimed invention **except** for explicitly stating that the pump access address would be an Internet Protocol (IP) compatible network address.” Page 7 of the Office Action also states the possibility that claim 15 may “**not** [be] anticipated by [De La] Huerga.” Therefore, Applicant respectfully submits that De La Huerga neither discloses nor suggests that “said acquisition processor receives fluid infusion related data from said plurality of concurrently operating infusion pumps using Internet Protocol (IP) compatible communication” as recited in claim 15 of the present invention. Consequently, withdrawal of the rejection of amended claim 15 under 35 USC 102(e) is respectfully requested.

In view of the above remarks and amendments to the claims, it is respectfully submitted that there is no 35 USC 112 enabling disclosure in De La Huerga that anticipates the present claimed invention. Thus, in view of the above remarks, it is respectfully submitted that claims 1-15 are not anticipated by De La Huerga. It is thus further respectfully submitted that this rejection is satisfied and should be withdrawn.

**Rejection of Claims 3 and 15 under 35 USC 103(a)**

Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being obvious over De La Huerga (U.S. Patent Application No. 2002/0038392).

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596, 1598 (Fed.Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (CCPA 1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion, or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed.Cir. 1988), *cert. denied*, 488 U.S. 825 (1988); *Ashland Oil Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 28, 293, 227 USPQ 657, 664 (Fed.Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed.Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed.Cir. 1992).

### CLAIM 3

Claim 3 is dependent on claim 1 and is considered to be patentable for the reasons given above with respect to claim 1. Claim 3 is also considered to be patentable because De La Huerga neither discloses nor suggests that “said plurality of concurrently operating infusion pumps are connected to an Internet Protocol (IP) compatible network and said

pump access address is an IP address” as recited in claim 3 of the present invention. Moreover, De La Huerga neither discloses nor suggests that “said plurality of **concurrently operating infusion pumps**” which are associated with a plurality of different patients at different locations “are connected to an Internet Protocol (IP) compatible network and said pump access address is an IP address” as recited in claim 3 of the present invention. Although De La Huerga may describe one more infusion pumps attached to a single patient, nowhere in De La Huerga is there mention or suggestion of the pumps being connected to an Internet Protocol (IP) compatible network, where the pump access address is an IP address as in the present claimed invention. As De La Huerga is only concerned with one patient who may have multiple pumps attached to him/her, there is no reason or motivation for De La Huerga to connect the infusion pumps to an IP-based network which enables transmission of data acquired from different patient locations, as in the present claimed invention. In De La Huerga, the individual patient information can be locally accessed by a controller and any network described therein is a short-range network such as a 802.11-based network enabling the multiple devices connected to the single patient to communicate with the controller.. Additionally, because De La Huerga does not connect to an Internet Protocol (IP) compatible network, the pump access addresses cannot be IP addresses, as in the present claimed invention.

The Office Action argues that De La “Huerga discloses that the network for operating concurrently a plurality of infusion pumps could be connected to the Internet (see paragraph [149]), and be connected to an Internet Protocol (IP) compatible network

where the pump access address is an IP address”. Applicant respectfully disagrees. Cited paragraph [0149] merely states that “[p]rocessor 104 is linked to each of display 123, indicators 124 and 126, transponder 122 and keyboard 106. In addition, as illustrated in FIG. 17, processor 103 is also linked to a communication channel 255 such as an intranet or the Internet for communication with other facility or remote computing and storage devices.” This is completely unrelated claim 3 of the present invention in which the **plurality of concurrently operating infusion pumps** are connected to an Internet Protocol (IP) compatible network. The claimed feature enables a user to remotely and centrally monitor a plurality of infusion devices that are connected to different patients in different locations by viewing a single display image of all the data. The cited passage of De La Huerga in contrast, merely shows that the processor of the system which connects a plurality of different pumps to a single patient is linked to a communication channel in order to communicate with other facilities or remote computing and storage devices enabling **storage** of data associated with the single patient. This is wholly unlike the present claimed invention and Applicant respectfully submits that there is no motivation in De La Huerga to modify the architecture described therein to provide the additional functions of the present claimed system.

Additionally, although De La Huerga may describe one more infusion pumps attached to a single patient, nowhere in De La Huerga is there mention or suggestion of the pumps being connected to an Internet Protocol (IP) compatible network, where the pump access address is an IP address as in the present claimed invention. As De La Huerga is only concerned with one patient who may have multiple pumps attached to



him/her, there is no reason or motivation for De La Huerga to connect the infusion pumps to a network, as in the present claimed invention. This is because the individual patient information can be locally accessed by a controller, as described by De La Huerga. Additionally, because the pumps of De La Huerga do not connect to an Internet Protocol (IP) compatible network, the pump access addresses cannot be IP addresses, as in the present claimed invention.

The Office Action, on the bottom of page 7, claims that “[i]t is examiners position that Huerga does disclose or teach ‘pump access address is an IP address.’” Applicant respectfully submits that nowhere in De La Huerga is there mention or suggestion a pump access address or a pump access address that is an IP address as in the present claimed invention.

The Office Action on page 7 further admits that De La “Huerga discloses the claimed invention **except** for explicitly stating that the pump access address would be an Internet Protocol (IP) compatible network address.” Page 7 of the Office Action also states the possibility that claim 3 may “**not** [be] anticipated by [De La] Huerga.” However, Applicant respectfully submits that the system of De La Huerga, even if it includes an IP compatible network, would still not make the present claimed invention unpatentable because De La Huerga is only concerned with single patient monitoring and control and **not** acquiring data from concurrently operating pumps associated with different patients at different locations as in the present claimed invention.

Even if De La Huerga utilized an Internet Protocol (IP) compatible network, the IP network would merely allow network communications between the controller of the de la Huerga system with a remote storage system or other computer. The controller, via a communication channel, could then communicate with other processors in other facilities or storage devices. Additionally, any transmission of data via this communication channel would include data associated with the multiple pumps for the single patient to which they are attached. However, this is not equivalent to the present claimed invention in which the multiple “**infusion pumps** are connected to an Internet Protocol (IP) compatible network and said pump access address is an IP address.” De La Huerga, even after being connected to an IP compatible network does not disclose or suggest the features of the present claimed invention. Additionally, as the **infusion pumps** in the combination of De La Huerga and an IP network are not connected to an IP compatible network, the combination also does not contain pump accesses addresses that are IP addresses as in the present claimed invention. Therefore, the combination system, similar to the individual system of De La Huerga, neither discloses nor suggests that “said plurality of concurrently operating infusion pumps are connected to an Internet Protocol (IP) compatible network and said pump access address is an IP address” as recited in claim 3 of the present invention. Consequently, withdrawal of the rejection of amended claim 3 under 35 USC 103(a) is respectfully requested.

#### CLAIM 15

Claim 15 is dependent on claim 12 and is considered to be patentable for the reasons given above with respect to claim 12. Claim 15 is also considered to be patentable

because De La Huerga neither discloses nor suggests that “said acquisition processor receives fluid infusion related data from said plurality of concurrently operating infusion pumps using Internet Protocol (IP) compatible communication” as recited in claim 15 of the present invention.

The Office Action argues that De La “Huerga discloses that the network for operating concurrently a plurality of infusion pumps could be connected to the Internet (see paragraph [149]), and be connected to an Internet Protocol (IP) compatible network where the pump access address is an IP address.” Applicant respectfully disagrees. Cited paragraph [0149] merely states that “[p]rocessor 104 is linked to each of display 123, indicators 124 and 126, transponder 122 and keyboard 106. In addition, as illustrated in FIG. 17, processor 103 is also linked to a communication channel 255 such as an intranet or the Internet for communication with other facility or remote computing and storage devices.” This is completely unrelated claim 15 of the present invention in which the **plurality of concurrently operating infusion pumps** use Internet Protocol (IP) compatible communication. The cited passage of De La Huerga merely shows that the processor is linked to a communication channel in order to communicate with other facilities or remote computing and storage devices. This is wholly unlike the present claimed invention.

Additionally, although De La Huerga may describe one or more infusion pumps being attached to a single patient, nowhere in De La Huerga is there mention or suggestion of the pumps using Internet Protocol (IP) compatible communication as in the

present claimed invention. As De La Huerga is only concerned with one patient who may have multiple pumps attached to him/her, there is no reason or motivation for the infusion pumps in De La Huerga to use IP compatible communication, as in the present claimed invention. This is because the individual patient information can be locally accessed by a controller, as described by De La Huerga.

Page 7 of the Office Action states the possibility that claim 15 may “**not** [be] anticipated by [De La] Huerga.” However, Applicant respectfully submits that De La Huerga, even with the addition of an IP compatible network would still not make the present claimed invention unpatentable.

Even if De La Huerga utilized an Internet Protocol (IP) compatible network, the IP network would merely allow network communication to a controller in De La Huerga. The controller, via a communication channel, could then communicate with other processors in other facilities or storage devices. However, this is not equivalent to the present claimed invention in which the multiple **infusion pumps** use Internet Protocol (IP) compatible communication. De La Huerga, even after being connected to an IP compatible network does not disclose or suggest the features of the present claimed invention. Therefore, the combination system, similar to the individual system of De La Huerga, neither discloses nor suggests that “said acquisition processor receives fluid infusion related data from said plurality of concurrently operating infusion pumps using Internet Protocol (IP) compatible communication” as recited in claim 15 of the present

invention. Consequently, withdrawal of the rejection of amended claim 15 under 35 USC 103(a) is respectfully requested.

In view of the above remarks, Applicant respectfully submits that De La Huerga and an Internet Protocol (IP) compatible network, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that makes claims 3 and 15 unpatentable. Therefore, Applicant further respectfully submits that this rejection has been satisfied and should be withdrawn.

#### CLAIM 18

Applicant respectfully submits that claim 18 was rejected in the Office Action, but was not addressed by the claim rejections under either section 102(e) or section 103(a). However, De La Huerga, when taken alone or in combination with an IP compatible network, neither discloses nor suggests that “said single display image shows said plurality of concurrently operating infusion pumps authorized by, or for patients, under the care of at least one of a physician, nurse, care unit, hospital department, clinic or practice group” as recited in claim 18 of the present invention. As argued in the above with respect to claim 1, De La Huerga merely describes multiple infusion pumps for a single patient. There is no mention or suggestion of “providing fluid infusion to a corresponding plurality of different patients in different locations” as in the present invention. Therefore, as De La Huerga deals only with a single patient, De La Huerga provides no U.S.C. 112 compliant enabling disclosure that would anticipate the present

claimed invention or make the present claimed invention unpatentable. Therefore, claim 18 should be allowable for the reasons presented above.

### **VIII. CONCLUSION**

De La Huerga, when taken alone or in combination with an Internet Protocol (IP) compatible network, neither discloses nor suggests “an acquisition processor for acquiring fluid infusion related data from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations” as recited in the present claimed invention. De La Huerga merely describes multiple infusion pumps connected to a single patient and controlling IV medication delivery. De La Huerga does not disclose or suggest the features of the present claimed invention. Additionally, De La Huerga neither discloses nor suggests a “display image [that] includes a plurality of user selectable elements associated with said corresponding plurality of concurrently operating infusion pumps; and a display processor for initiating generation of data representing said single display image and a second image including parameters specific to a particular pump in response to user selection of a displayed element associated with said particular pump” as recited in the present claimed invention.

Accordingly it is respectfully submitted that the rejection of claims 1 – 15 and 18  
be reversed.

Respectfully submitted,  
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**APPENDIX I – APPEALED CLAIMS**

1. (Previously Presented) An information system supporting a plurality of network connected infusion pumps, comprising:

an acquisition processor for acquiring fluid infusion related data from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations;

a data processor for processing said acquired fluid infusion related data to provide data suitable for presentation in a single display image identifying said plurality of concurrently operating infusion pumps together with status information identifying status of individual pumps of said plurality of concurrently operating infusion pumps, said display image includes a plurality of user selectable elements associated with said corresponding plurality of concurrently operating infusion pumps; and

a display processor for initiating generation of data representing said single display image and a second image including parameters specific to a particular pump in response to user selection of a displayed element associated with said particular pump.

2. (Previously Presented) An information system according to claim 1, wherein

said acquisition processor acquires said fluid infusion related data via a network and

said acquired fluid infusion related data provides data associated with individual pumps including at least one of, (a) pump location, (b) pump access address, (c) pump start time, (d) pump flow rate, (e) a fluid identifier in a pump and (f) fluid volume dispensed.

3. (Original) An information system according to claim 2, wherein

said plurality of concurrently operating infusion pumps are connected to an Internet Protocol (IP) compatible network and said pump access address is an IP address.



4. (Previously Presented) An information system according to claim 1, wherein

said second image includes data identifying at least one of, (a) pump location and (b) an associated patient.

5. (Previously Presented) An information system according to claim 1, wherein

said second image includes at least one of, (a) a current fluid flow rate, (b) fluid volume delivered, (c) a fluid identifier, (d) an authorizing physician identifier, (e) a fluid infusion time remaining indicator, (f) a particular pump IP address, (g) a current time, (h) a user selectable data refresh rate, (i) parameters specific to said particular pump and (j) a user selectable item supporting user manual entry of a fluid infusion related value.

6. (Original) An information system according to claim 5, wherein

said second image includes at least one of, (a) a graphical representation of fluid infusion flow rate and (b) a graphical representation of infusion fluid volume delivered.

7. (Original) An information system according to claim 5, wherein

said user selectable item supporting user manual entry of a fluid infusion related value initiates generation of a third image enabling at least one of, (a) a user to alter an existing infusion flow rate or fluid volume delivered value and (b) a user to add a new infusion flow rate or fluid volume delivered value.

8. (Original) An information system according to claim 1, including

an authentication processor for determining a user is authorized to access information concerning an infusion pump and said data processor inhibits presentation of said second image including parameters specific to said particular pump in response to a determination access is unauthorized.

9. (Previously Presented) An information system according to claim 1, wherein

said second image includes data identifies pump location and including an authentication processor for determining a user is authorized to access information concerning an infusion pump and said data processor inhibits access to pump information in response to a determination access is unauthorized.

10. (Original) An information system according to claim 1, wherein said data processor processes said acquired fluid infusion related data to provide data to at least one of, (a) a repository of electronic patient medical records for storage in a corresponding plurality of electronic patient medical records in said repository, (b) a pharmacy information system for use in re-stocking medications, (c) a medication order information system for use in monitoring use of particular fluid medications and (d) a patient management information system for use in monitoring patient usage of fluid medications.

11. (Previously Presented) An information system according to claim 1, wherein

said acquisition processor acquires said fluid infusion related data via a network supporting communication with said plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations.

12. (Previously Presented) A system supporting a plurality of network connected infusion pumps, comprising:

an acquisition processor for receiving fluid infusion related data from a plurality of concurrently operating infusion pumps providing fluid infusion to a corresponding plurality of different patients in different locations, said received data identifying said plurality of concurrently operating infusion pumps together with status information identifying status of individual pumps of said plurality of concurrently operating infusion pumps;

a data processor for processing said received fluid infusion related data to be suitable for storage in a database; and

a conversion processor for retrieving fluid infusion related data from said database and for converting said retrieved fluid infusion related data to a data format of a second different system.

13. (Original) A system according to claim 12, wherein  
said conversion processor,

converts said retrieved fluid infusion related data to a data format of a second different system comprising at least one of, (a) a repository of electronic patient medical records for storage in a corresponding plurality of electronic patient medical records in said repository, (b) a pharmacy information system for use in re-stocking medications, (c) a medication order information system for use in monitoring use of particular fluid medications and (d) a patient management information system for use in monitoring patient usage of fluid medications and initiates communication of said converted fluid infusion related data to said second different system in response to user command.

14. (Original) A system according to claim 12, wherein  
said conversion processor converts said retrieved fluid infusion related data to a data format suitable for presentation in a single display image.

15. (Original) An information system according to claim 12, wherein  
said acquisition processor receives fluid infusion related data from said plurality of concurrently operating infusion pumps using Internet Protocol (IP) compatible communication.

16. (Withdrawn) A method for managing information concerning a plurality of network connected infusion pumps, comprising the steps of:

acquiring fluid infusion related data from a plurality of concurrently operating infusion pumps;

processing said acquired fluid infusion related data to provide data suitable for presentation in a single display image, said single display image identifying said plurality of concurrently operating infusion pumps together with status information

identifying status of individual pumps of said plurality of concurrently operating infusion pumps.

17. (Withdrawn) A method for supporting a plurality of network connected infusion pumps, comprising the steps of:

receiving fluid infusion related data from a plurality of concurrently operating infusion pumps, said received data identifying said plurality of concurrently operating infusion pumps together with status information identifying status of individual pumps of said plurality of concurrently operating infusion pumps;

processing said received fluid infusion related data to be suitable for storage in a database;

retrieving fluid infusion related data from said database; and

converting said retrieved fluid infusion related data to a data format of a second system.

18. (Previously Presented) An information system according to claim 1 wherein said single display image shows said plurality of concurrently operating infusion pumps authorized by, or for patients, under the care of at least one of a physician, nurse, care unit, hospital department, clinic or practice group.

**APPENDIX II - EVIDENCE**

Applicant does not rely on any additional evidence other than the arguments submitted hereinabove.

**APPENDIX III - RELATED PROCEEDINGS**

Applicant respectfully submits that there are no proceedings related to this appeal in which any decisions were rendered.

#### **APPENDIX IV - TABLE OF CASES**

1. *In re Howard*, 394 F. 2d 869, 157 USPQ 615, 616 (CCPA 1968)
2. 29 AM. Jur 2D Evidence S. 33 (1994)
3. *In re Ahlert*, 424 F. 2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970)
4. *In re Eynde*, 480 F. 2d 1364, 1370; 178 USPQ 470, 474 (CCPA 1973)
5. *In re Fine*, 5 USPQ 2d 1600, (Fed Cir. 1988)
6. ACS Hospital Systems Inc v. Montefiore Hospital, 221 USPQ 929,933  
(Fed. Cir. 1984)
7. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (CCPA 1966)
8. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438  
(Fed.Cir. 1988), *cert. denied*, 488 U.S. 825 (1988)
9. *Ashland Oil Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 28, 293, 227 USPQ  
657, 664 (Fed.Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986)
10. *In re Oetiker*, 977 F2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)

#### **APPENDIX V - LIST OF REFERENCES**

<b><u>U.S. Appl. Pub. No.</u></b>	<b><u>Issued Date</u></b>	<b><u>102(e) Date</u></b>	<b><u>Inventors</u></b>
US 2002/003892			De La Huerga

TABLE OF CONTENTS

<u>ITEMS</u>	<u>PAGE</u>
I. Real Party in Interest	2
II. Related Appeals and Interferences	2
III. Status of Claims	2
IV. Status of Amendments	2
V. Summary of the Claimed Subject Matter	2-7
VI. Grounds of Rejection to be Reviewed on Appeal	7 - 8
VII. Argument	8-38
VIII Conclusion	38-39

APPENDICES

I. Appealed Claims	40-44
II. Evidence	45
III. Related Proceedings	46
IV. Table of Cases	47
V. List of References	47